

CLAIMS

1. A composition comprising at least 0.1 wt.% of granules suitable for use in foodstuffs, said granules having an average diameter in the range of 30-3000 μm and comprising:
 - a. 3-70 wt.% of a plurality of non-lipophilic particles with an average diameter in the range of 3-300 μm , said particles containing at least 0.1 wt.% of one or more functional food ingredients
 - b. 10-80 wt.% of a discrete continuous phase containing at least 90 wt.% lipids, which continuous phase envelops the non-lipophilic particles and holds them together, the combination of non-lipophilic particles and the continuous phase forming an agglomerate with a diameter in the range of 20-2000 μm ; and
 - c. 10-80 wt.% of an exterior lipophilic layer that encompasses the agglomerate, which lipophilic layer exhibits a slip melting point of at least 30°C.
2. The composition according to claim 1, wherein the average diameter of the granules is in the range of 40-290 μm , preferably in the range of 50-250 μm , said granules comprising:
 - i. 10-70 wt.% of a plurality of the non-lipophilic particles, said non-lipophilic particles having an average diameter in the range of 10-150 μm , preferably of 20-100 μm ; and
 - ii. 30-90 wt.% of the discrete continuous phase, said discrete continuous phase exhibiting a slip melting point of at least 30°C; and10-50 wt.% of the exterior lipid layer, wherein the slip melting point of said exterior lipid layer does not exceed the slip melting point of the discrete continuous phase by more than 5°C.
3. The composition according to claim 1, wherein the non-lipophilic particles contain at least 10 wt.% of one or more food components selected from the group of carbohydrates, proteins, salt and functional food ingredients, said

functional food ingredients representing at least 0.1 wt.% of the non-lipophilic particles and being selected from the group of enzymes, oxidoreductants, acidulants, hydrocolloids, micro-organisms, flavours and combinations thereof.

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4. The composition according to any one of the preceding claims, wherein the plurality of non-lipophilic particles represent between 10 and 40 wt.%, preferably between 12 and 35 wt.% of the granules.

- 10 5. The composition according to any one of the preceding claims, wherein the non-lipophilic particles contain between 0.01 and 5 wt.%, preferably between 0.1 and 3 wt.% of enzyme.

- 15 6. The composition according to any one of the preceding claims, wherein the non-lipophilic particles contain at least 30 wt.%, preferably at least 50 wt.% of hydrocolloid, flour, gluten, salt, sugar or a mixture thereof.

- 20 7. The composition according to any one of the preceding claims, wherein the agglomerate contains 25-60 wt.% of the plurality of non-lipophilic particles and 75-40 wt.% of the discrete continuous phase.

8. The composition according to any one of the preceding claims, wherein the granules contain 15-30 wt.% of the exterior lipid layer.

- 25 9. The composition according to any one of the preceding claims, wherein the exterior lipid layer has a thickness in the range of 6-25 μm , preferably of 7-20 μm .

- 30 10. The composition according to any one of the preceding claims, wherein the exterior lipid layer exhibits a melting point of 30-50°C, preferably of 32-45°C.

11. The composition according to any one of the preceding claims, wherein the lipids in the discrete continuous phase are selected from the group consisting

of triglycerides, diglycerides, monoglycerides, phospholipids, datems, lactems, citrems, acetems, stearyl-lactylates, polyglycerol esters, sucrose esters of fatty acids, fatty acids, waxes, soaps and combinations thereof.

- 5 12. The composition according to any one of the preceding claims, wherein the functional food ingredient is selected from the group consisting of enzymes, oxidoreductants, acidulants, micro-organisms, flavours and combinations thereof.
- 10 13. The composition according to any one of the preceding claims, wherein the exterior lipophilic layer contains at least 80 wt.% lipids selected from the group consisting of triglycerides, diglycerides, monoglycerides, phospholipids, datems, lactems, citrems, acetems, stearyl-lactylates, polyglycerol esters, sucrose esters, fatty acids, waxes, soaps and
15 combinations thereof.
14. The composition according to any one of the preceding claims, said granules containing:
10-60 wt.% of the plurality of non-lipophilic particles;
20 15-40 wt.% of the discrete continuous phase; and
15-60 wt.% of the exterior lipophilic layer.
15. The composition according to any one of the preceding claims, wherein the melting point of the exterior layer does not exceed the melting point of the
25 discrete continuous phase.
16. The composition according to any one of the preceding claims, wherein the composition contains at least 1 wt.%, preferably at least 10 wt.%, more preferably at least 90 wt.% of the granules.
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17. Use of a composition according to any one of the preceding claims in the preparation of a dough or a batter, preferably a bread dough.

18. A dough or a batter comprising between 0.01 and 5 wt.% of the granules as defined in claim 1.

19. A method of manufacturing a composition according to any one of claims 2-18, said method comprising:

- a. providing non-lipophilic particles with an average diameter in the range of 10-150 μm , said particles containing at least 0.1 wt.% of one or more functional food ingredients;
- b. combining said non-lipophilic particles with a first molten lipid material with a melting of 30-45°C in a weight ratio of 1:9 to 7:3, followed by mixing so as to obtain a homogeneous dispersion of the non-lipophilic particles in the molten lipid material,
- c. converting the homogenous dispersion into agglomerates in which a plurality of the non-lipophilic particles is enveloped by a discrete continuous lipid phase, said agglomerates exhibiting an average diameter in the range of 20-200 μm ;
- d. coating said agglomerates with a second molten lipid material with a melting point of at least 30°C so as to produce coated agglomerates that are fully encompassed by an exterior lipid layer, wherein the melting point of said exterior lipophilic layer does not exceed the melting point of the discrete continuous lipid phase by more than 5°C;
- e. cooling the coated agglomerates to ambient temperature or lower; and
- f. collecting the coated agglomerates to obtain the granulate.

20. The method according to claim 19, wherein the homogeneous dispersion is converted into agglomerates by means of spray chilling or extrusion, preferably by spray chilling.

21. The method according to claim 19 or 20, wherein the coating step d. employs fluidised bed coating or rotating drum coating.